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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,234	12/14/2000	James R. Moran	12598.0128.NPUS00	8345
	7590		SOLU:12	
Craig M. Lundell, Esq. HOWREY, SIMON, ARNOLD & WHITE, LLP PO Box 4433 Houston, TX 77210-4433			EXAMINER FERGUSON, LAWRENCE D	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/737,234	Applicant(s) MORAN ET AL.	
	Examiner Lawrence D Ferguson	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9,10,12 and 14-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9,10,12 and 14-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed May 19, 2004.

Claims 1, 6, 9 and 15 were amended rendering claims 1-6, 9-10, 12 and 14-24 pending.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6, 9-10, 12 and 14-24 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 5-7, 9-10, 13 and 15-16 of copending Application No. 09/962750. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications include a composite laminate interlayer for a glass laminate comprising a sheet of polyethylene terephthalate between two layers of plasticized polyvinyl butyral, wherein each plasticized polyvinyl butyral layer is between about

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10-80 mils and the polyvinyl butyral has a glass transition temperature greater than at least 35°C. Although copending Application No. 09/962750 does not explicitly teach a tensile modulus, maximum flexural modulus or maximum load, these features are inherently present in the composite laminate interlayer of 09/962750.

The claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Mere recitation of a newly discovered function or property, inherently possessed by things in prior art, does not cause claim drawn to those things to distinguish over prior art. The Patent Office can require applicant to prove that subject matter shown to be in prior art does not possess characteristic relied on where it has reason to believe that functional limitation asserted to be critical for establishing novelty in claimed subject matter may be inherent characteristic of prior art; this burden of proof is applicable to product and process claims reasonably considered as possessing allegedly inherent characteristics.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections – 35 USC § 103(a)

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

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a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 9-10, 12 and 14-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moran (U.S. 5,091,258).

Moran discloses a composite laminate comprising polyvinyl butyral layers (14 and 16) and a polyethylene terephthalate (PET) interlayer (12) having a functional coating layer (18) (column 4, lines 29-57, claim 4 and Figure 1) and glass sheets (9, 11) where the optional coating of interlayer (12) reflects radiation (column 3, lines 54-65). Moran further discloses the layer of polyvinyl butyral has a thickness of about 5 to 30 mils, where the thickness of the two polyvinyl butyral layers may be the same or different thickness (column 4, lines 11-19). The reference discloses the PET layer has a tensile modulus at 25°C at about 10^{10} Pa (column 4, lines 48-56). In instant claim 5, the phrase "for reducing radiation transmission through said glass laminate" is an intended use, which is given little patentable weight in product claims. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Moran does not explicitly disclose the claimed thickness of the PET interlayer as in instant claims 3-4, 6, 9 and 15. The experimental modification of this prior art in order to achieve optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller* USPQ 233. One of ordinary skill in the art would have been motivated to adjust the thickness of the PET layer in order to optimize the resilience of the laminate interlayer. (See *In re Boesch and Slaney*, 205 USPQ 215). Although the reference does not teach a glass transition temperature, maximum load or maximum flex modulus, it would have been obvious to one of ordinary skill in the art to

include these features because Moran teaches the same materials having the same function as applicants claimed invention. With respect to the claimed temperature transition, maximum load and maximum flex modulus of the composite laminate, these features are directly related to the specific plasticized material used. Since the reference uses the same polyvinyl butyral and PET layers as claimed by applicant, the temperature transition, maximum load and maximum flex modulus of the glass laminate would be expected to be the same as Applicant claims.

Response to Arguments

5. Applicant's remarks to obviousness-type double patenting as being unpatentable over claims 1-2, 5-7, 9-10, 13 and 15-16 of copending Application No. 09/962750 have been considered but are unpersuasive. Applicant argues the differences between the '750 application and the instant application are many, but most distinctive is that the '750 application, a stiff PVB sheet is used with PET in a laminate composite structure, improves the overall intrusion resistance of the glass laminate, where the present invention utilizes two separate, bonded PET layers to accomplish the improved intrusion resistance. Examiner respectfully disagrees because Applicant claims "a sheet of polyethylene terephthalate between two layers of plasticized polyvinyl butyral adhesive layers" instant claim 1 and further claims "wherein said sheet of polyethylene terephthalate has a functional coating" in claim 5. There is no disclosure in the present invention of two PET layers. Furthermore an additional PET layer is merely a duplication of an essential working part, which involves only routine skill in the art.

Applicant's remarks to rejection made under 35 USC 103(a) as being unpatentable over Moran (U.S. 5,091,258) have been considered but are unpersuasive. Applicant argues the PET layer used in Moran is much thinner than that proposed in thickness in the present invention. Moran does not explicitly disclose the claimed thickness of the PET interlayer as in instant claims 3-4, 6, 9 and 15. The experimental modification of this prior art in order to achieve optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller* USPQ 233. One of ordinary skill in the art would have been motivated to adjust the thickness of the PET layer in order to optimize the resilience of the laminate interlayer. (See *In re Boesch and Slaney*, 205 USPQ 215). Applicant further argues the claimed maximum flexural modulus is much higher than that of Moran. Although the reference does not teach a maximum flex modulus, it would have been obvious to one of ordinary skill in the art to include these features because Moran teaches the same materials having the same function as applicants claimed invention. With respect to the claimed maximum flex modulus of the composite laminate, these features are directly related to the specific plasticized material used. Since the reference uses the same polyvinyl butyral and PET layers as claimed by applicant, the maximum flexural modulus of the glass laminate would be expected to be the same as Applicant claims. Applicant argues Moran is primarily directed for use in an automobile windshield and one would not incorporate a stiff PVB layer into Moran. Applicant is arguing the PVB layer is insufficient because of its intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the

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prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Moran meets the newly added claim limitation of a tensile modulus at 25°C of greater than about 10^7 Pa in column 4, lines 48-56.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lawrence Ferguson
Patent Examiner
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Supervisory